

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Reexamination Control No.: (New)

In re: U.S. Patent No. 6,722,686

Reexamination Filing Date: January \_\_, 2008

Patentee: Koy

For: COUPLER LOCKING DEVICE AND METHOD

Mail Stop Inter Partes Reexam  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REQUEST FOR INTER PARTES REEXAMINATION**

Dear Examiner:

Inter partes reexamination under 35 U.S.C. §§ 311-318 is requested of United States Patent No. 6,722,686 which issued on April 20, 2004 to Tim Vander Koy. This patent was filed on May 1, 2002 and remains in force. A stay has been granted to facilitate this Reexamination; as such, Diversi-Tech Corp. kindly requests expedited review of this Request in accordance with MPEP §2686.04.

**(A) Fee for Requesting Inter Partes Reexamination**

The fee for requesting inter partes reexamination set forth in §1.20(c)(2) has been made as explained in the “Request for Inter Partes Reexamination Transmittal Form” accompanying this Request.

**(B) Identification of the Patent and Claims for which Reexamination is Requested**

Diversi-Tech Corp., by and through its attorneys (hereinafter “Requestor”), respectfully requests Inter Partes Reexamination of United States Patent No. 6,722,686,

issued on April 20, 2004, to Tim Vander Koy. This patent was filed on May 1, 2002. Requestor requests reexamination of claims 1 through 18.

**(C) Patents and Printed Publications Presented to Provide a Substantial New Question of Patentability**

The patents and printed publications which are presented to provide a substantial new question of patentability are set forth in the accompanying Information Disclosure Statement forms.

**(D) Substantial New Questions of Patentability**

In light of recent action at the USPTO, Diversi-Tech respectfully submits that there is a substantial question as to the validity of the 6,722,686 patent. During the prosecution of U.S. Patent No. 7,121,121 to Wyers, the Wyers prosecuting attorney attempted to provoke an interference with the Koy patent. In an Amendment received by the USPTO on October 12, 2004, the Wyers prosecuting attorney specifically stated in the remarks section that he had copied the claims from the Koy patent in an attempt to provoke an interference. A copy of this correspondence is attached hereto as Exhibit A.

In response to the amendments and copied claims, the Examiner rejected each of the copied claims as obvious in light of the art presented below. In accordance with MPEP §1003(6), the Technology Center Director signed the action as it held “unpatentable claims copied from a patent for interference purposes where the grounds relied upon are equally applicable to the patentee.” A copy of this action is attached hereto as Exhibit B. Requestor respectfully submits that this action is material to the question of whether or not there is a substantial new question of patentability. MPEP §2642(II)(D).

A prior art patent or printed publication raises a substantial new question of patentability where there is a substantial likelihood that a reasonable examiner would consider the references important in deciding whether or not the claim is patentable, and where the same question of patentability as to the claim has not been decided for that patent in a previous or pending proceeding, or a final holding of invalidity by a federal court. MPEP §2642(I). The Smith reference (U.S. Patent 5,873,271), Bale reference

(U.S. Patent 6,406,052), Wyers reference (U.S. Patent 7,121,121), Lee reference (U.S. Patent 6,378,343), Ray reference (U.S. Patent 4,741,454) and Witchey reference (U.S. Patent 6,698,256) are all new prior art previously unconsidered in the prosecution of the Koy patent. Nor has there has been a final holding of invalidity by a federal court.

Diversi-Tech respectfully submits that a substantial new question of patentability exists as to the Koy patent. Given that an Examiner has already determined that the cited references are relevant to the question of validity of the claims (by rejecting the claims in light of the new art), Requestors submit that a reasonable Examiner would consider these references important in deciding the patentability of the original Koy claims.

Requestor presents below a detailed explanation of how the new cited art, in combination with previously considered art, raises a substantial question of patentability.

Claim 1. Claim 1 is anticipated under §102(e) by Wyers, and under §102(a) by Bale and by Smith. Claim 1 is also obvious under §103(a) in view of Almquist and Bale or Almquist and Smith. The motivation to combine would be to substitute the padlock of Almquist with an integral lock such as those shown in Bale and Smith in order to provide a unitary device and to prevent the possibility of loss of the padlock. It would be a further motivation to add the increased security of an integral lock to the device taught by Almquist.

Claim 1 is also obvious in view of Almquist and Ray. Ray teaches that it is well known to provide an integral lock 80 and latch 92 in a housing to engage an aperture of a locking bar. It would have been obvious to substitute the teaching of Ray, the motivation being to prevent the potential loss of the padlock of Almquist when it is not in use, and to provide a more secure, integral device.

The limitations of the claims taught by these references are detailed in the claim chart below.

Claim 1. A device for closing the a socket of an unhitched trailer hitch coupler, said device comprising:	Almquist discloses a device for closing the sock of an unhitched trailer hitch coupler (Fig. 4, Col. 1, 60-64), as does Bale (Fig. 1, Col. 1, 59-63), Smith (Col. 1, 1-5), and Wyers (Figs.1-2, Abstract).
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<p>a locking bar wherein at least a portion thereof rests on top of the trailer hitch coupler; and</p>	<p>Almquist (Fig. 1, bail 46; Col. 4, 3-7); Bale (Fig. 1, retainer assembly 3; Col. 3-4, 67-8); Smith (Fig. 1, upper jaw 12; Col. 3, 44-53); Wyers (Fig. 2, bridge section 24; Col. 6, 4-8).</p>
<p>a base comprising a plug member for receipt within said trailer hitch coupler socket,</p>	<p>Almquist (Fig. 1, body member 12 and plug 40; Col. 3, 48-53); Bale (Fig. 1, body 1 and hitch ball 26; Col. 3, 40-44); Smith (Fig. 1, lower jaw 11 and dummy ball 46; Col. 3, 44-45); Wyers (Fig. 2, lock housing 30 and hitch ball element 32; Col. 3, 63-67).</p>
<p>a locking bar-receiving aperture, and</p>	<p>Almquist (Fig. 1, bail arm hole 26; Col. 3-4, 67-2); Bale (Fig. 14, aperture 120); Smith (Fig. 1, bore 16; Col. 2, 7-12); Wyers (Fig. 3, passageways 56; Col. 6, 39-44).</p>
<p>an integral locking means for lockingly engaging said locking bar within said aperture.</p>	<p>Bale (Figs. 1 and 4, locking mechanism 22; Col. 4, 13-26); Smith (Fig. 1, locking mechanism 30; Col. 2, 28-35); Wyers (Fig. 1, lock mechanism 34; Fig 18 generally; Col. 6, 33-38); Ray (Fig. 3, integral lock 80 and latch 92).</p>

Claim 2. Claim 2 is anticipated by Wyers under §102(e). Claim 2 is also an obvious combination of Almquist and Ray, as described above. Requestors interpret the latch 92 as being a type of bolt as claimed.

<p>Claim 2.</p> <p>The device of claim 1 wherein said integral locking means comprises a bolt and key mechanism for operating said bolt housed within said base</p>	<p>Wyers (Figs. 18-19); Ray (Fig. 3, integral lock 80 and latch 92).</p>
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Claim 3. Claim 3 is anticipated by Wyers under §102(e). Claim 3 is also an obvious combination of Almquist and Ray, as described above.

<p>Claim 3.</p> <p>The device of claim 2 wherein said bolt is moveable between a locked position wherein said bolt engages said locking bar within said aperture thereby preventing removal of said locking bar from said aperture and an unlocked position wherein said bolt does not engage said locking bar within said aperture thereby permitting removal of said locking bar from said aperture.</p>	<p>Wyers (Fig. 18 showing locked position, Fig 19 showing unlocked position); Ray (Fig. 3, integral lock 80 and latch 92).</p>
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Claim 4. Claim 4 is anticipated under §102(e) by Wyers and under §102(a) by Bale and also by Smith. Claim 4 is also obvious under §103(a) in view of Almquist and Bale or Almquist and Smith. The motivation to combine would be to substitute the padlock of Almquist with an integral lock such as those shown in Bale and Smith in order to provide a unitary device and to prevent the possibility of loss of the padlock. It would be a

further motivation to add the increased security of an integral lock to the device taught by Almquist.

Claim 4 is also obvious in view of Almquist and Ray. Ray teaches that it is well known to provide an integral lock 80 and latch 92 in a housing to engage an aperture of a locking bar. It would have been obvious to substitute the teaching of Ray, the motivation being to prevent the potential loss of the padlock of Almquist when it is not in use, and to provide a more secure, integral device.

Claim 4 is also obvious in view of Almquist and Witchey. As noted on page 6 of the Examiner's decision on the Wyers patent included in Exhibit A: "Witchey teaches a locking device including a housing 770, 660 supporting an anchor 720 and having an integral key lock and latch 800, 710 to engage a leg 640 and latch structure 650 of a shackle 640, and a bridge plate 630 overlying the anchor 720. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a ball element for the anchor 720 of Witchey, in view of the teaching of Almquist, since either type of element is capable of engaging a recess of a trailer hitch."

The limitations of the claims taught by these references are detailed in the claim chart below.

<p>Claim 4.</p> <p>A device for closing a socket of an unhitched trailer hitch coupler, said device comprising:</p> <p>a locking bar wherein at least a portion thereof rests on top of the trailer hitch coupler; and</p> <p>a base comprising a plug member for</p>	<p>Almquist discloses a device for closing the sock of an unhitched trailer hitch coupler (Fig. 4, Col. 1, 60-64), as does Bale (Fig. 1, Col. 1, 59-63), Smith (Col. 1, 1-5), and Wyers (Figs.1-2, Abstract).</p> <p>Almquist (Fig. 1, bail 46; Col. 4, 3-7); Bale (Fig. 1, retainer assembly 3; Col. 3-4, 67-8); Smith (Fig. 1, upper jaw 12; Col. 3, 44-53); Wyers (Fig. 2, bridge section 24; Col. 6, 4-8); Witchey (Fig. 2, upper pate 610).</p>
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receipt within said trailer hitch coupler socket,	Almquist (Fig. 1, body member 12 and plug 40; Col. 3, 48-53); Bale (Fig. 1, body 1 and hitch ball 26; Col. 3, 40-44); Smith (Fig. 1, lower jaw 11 and dummy ball 46; Col. 3, 44-45); Wyers (Fig. 2, lock housing 30 and hitch ball element 32; Col. 3, 63-67).
a locking bar-receiving aperture, and	Almquist (Fig. 1, bail arm hole 26; Col. 3-4, 67-2); Bale (Fig. 14, aperture 120); Smith (Fig. 1, bore 16; Col. 2, 7-12); Wyers (Fig. 3, passageways 56; Col. 6, 39-44); Withey (Fig. 2, hollow bore 680).
an integral lock for lockingly engaging said locking bar within said aperture.	Bale (Figs. 1 and 4, locking mechanism 22; Col. 4, 13-26); Smith (Fig. 1, locking mechanism 30; Col. 2, 28-35); Wyers (Fig. 1, lock mechanism 34; Fig. 18 generally; Col. 6, 33-38); Ray (Fig. 3, integral lock 80 and latch 92); Withey, Fig. 2, lock mechanism 700).

Claim 5. Claim 5 is anticipated under §102(e) by Wyers and under §102(a) by Bale and Smith. Claim 5 is also unpatentable under §103(a) over one of Bale or Smith in view of Almquist. The motivation to combine would be to combine the adjustable-height bar of Smith or Bale with the single-height bar of Almquist to allow Almquist to accommodate a variety of trailers. Claim 5 is also unpatentable over Almquist in view of Withey, as discussed above.

Claim 5. The device of claim 4 wherein said locking bar may be locked within said aperture at a	Bale (Fig. 1, tab 32 with apertures 34; Col. 4, 4-9); Smith (Fig. 1, scallops 31
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plurality of positions therealong so that said device may accommodate trailer hitch couplers of variable heights.	allow locking at a plurality of positions; Col. 2, 31-35); Wyers (Fig. 2; Col. 2, 57-60); Witchey (Fig. 2, notches 650 allow locking at a plurality of positions).
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Claim 6. Claim 6 is anticipated under §102(e) by Wyers and §102(a) by Smith. Claim 6 is also unpatentable under §103(a) over Almquist in view of Smith. The motivation to combine would be to use the adjustable-height mechanism of Smith (the grooves, which Smith calls scallops 31) with the single-height bar of Almquist to allow Almquist to accommodate a variety of trailers.

Claim 6 is also obvious over Almquist in view of Lee. Lee teaches that it is well known in the locking art to use a ratchet system for locking a leg in a housing, and allowing the lock to be engaged at a variety of heights. It would have been obvious to substitute the single hole of Almquist with the teeth (groove) system of Lee in order to allow locking at a variety of positions.

Claim 6 is also obvious over Almquist in view of Witchey. It would have been obvious to substitute the single hole of Almquist with the teeth (notches) system of Witchey in order to allow locking at a variety of positions.

Claim 6. The device of claim 4, wherein said locking bar includes at least one lock-engagable groove thereon permitting said locking bar to be locked within said aperture at a discrete position therealong.	Smith (Fig. 1, scallops 31); Wyers (Fig. 3, latch teeth 58); Lee (Fig. 3, teeth 40 on bar 38); Witchey (Fig. 2, notches 650).
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Claim 7. Claim 7 is anticipated under §102(e) by Wyers and §102(a) by Smith. Claim 7 is also unpatentable under §103(a) over Almquist in view of Smith. The motivation to combine would be to use the adjustable-height mechanism of Smith (the grooves, which Smith calls scallops 31) with the single-height bar of Almquist to allow Almquist to accommodate a variety of trailers. Claim 7 is also obvious over Almquist in view of Lee.



Lee teaches that it is well known in the locking art to use a ratchet system for locking a leg in a housing, and allowing the lock to be engaged at a variety of heights. It would have been obvious to substitute the single hole of Almquist with the teeth (groove) system of Lee in order to allow locking at a variety of positions.

Claim 7 is also obvious over Almquist in view of Witchey. It would have been obvious to substitute the single hole of Almquist with the teeth (notches) system of Witchey in order to allow locking at a variety of positions.

Claim 7.	
The device of claim 6, wherein said locking bar includes a plurality of lock-engagable grooves thereon permitting said locking bar to be locked within said aperture at a plurality of discrete positions therealong so that said device may accommodate trailer hitch couplers of variable heights.	Smith (Fig. 1, scallops 31); Wyers (Fig. 3, latch teeth 58); Lee (Fig. 3, teeth 40 on bar 38); Witchey (Fig. 2, notches 650).

Claim 8. Claim 8 is anticipated under §102(e) by Wyers. Claim 8 is also obvious under §103(a) in view of Almquist and Bale or Almquist and Smith. The motivation to combine would be to substitute the padlock of Almquist with an integral lock such as those shown in Bale and Smith in order to provide a unitary device and to prevent the possibility of loss of the padlock. It would be a further motivation to add the increased security of an integral lock to the device taught by Almquist.

Claim 8 is also obvious in view of Almquist and Ray. Ray teaches that it is well known to provide an integral lock 80 and latch 92 in a housing to engage an aperture of a locking bar. It would have been obvious to substitute the teaching of Ray, the motivation being to prevent the potential loss of the padlock of Almquist when it is not in use, and to provide a more secure, integral device.

Claim 8 is also obvious in view of Almquist and Witchey. As noted on page 6 of the Examiner's decision on the Wyers patent included in Exhibit A: "Witchey teaches a locking device including a housing 770, 660 supporting an anchor 720 and having an

integral key lock and latch 800, 710 to engage a leg 640 and latch structure 650 of a shackle 640, and a bridge plate 630 overlying the anchor 720. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a ball element for the anchor 720 of Witchey, in view of the teaching of Almquist, since either type of element is capable of engaging a recess of a trailer hitch.”

The limitations of the claims taught by these references are detailed in the claim chart below.

<p>Claim 8.</p> <p>A device for closing a socket of an unhitched trailer hitch coupler member, said device comprising:</p> <p>a locking bar having a pair of arms, wherein at least a portion of said locking bar rests on top of the trailer hitch coupler;</p> <p>a base comprising a plug member for receipt within the trailer hitch coupler socket,</p> <p>a pair of arm-receiving apertures, and</p>	<p>Almquist discloses a device for closing the sock of an unhitched trailer hitch coupler (Fig. 4, Col. 1, 60-64), as does Bale (Fig. 1, Col. 1, 59-63), Smith (Col. 1, 1-5), and Wyers (Figs.1-2, Abstract).</p> <p>Almquist (Fig. 1, bail 46 with arms 48 and 50; Col. 3, 64-67); Wyers (Fig. 2, bridge section 24 with legs 22; Col. 5, 57-61); Witchey (Fig. 2, upper plate 610 with post 640 and guide rib 655).</p> <p>Almquist (Fig. 1, body member 12 and plug 40; Col. 3, 48-53); Bale (Fig. 1, body 1 and hitch ball 26; Col. 3, 40-44); Smith (Fig. 1, lower jaw 11 and dummy ball 46; Col. 3, 44-45); Wyers (Fig. 2, lock housing 30 and hitch ball element 32; Col. 3, 63-67); Witchey (Fig. 2, male hitch anchor 720; Col. 3, 29-31).</p> <p>Almquist (Fig. 1, bail arm holes 26; Col. 3-4, 67-2); Wyers (Fig. 3, passageways 56;</p>
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<p>an integral lock for lockingly engaging a first said arm within a corresponding said arm-receiving aperture.</p>	<p>Col. 6, 39-44).</p> <p>Bale (Figs.1 and 4, locking mechanism 22; Col. 4, 13-26); Smith (Fig. 1, locking mechanism 30; Col. 2, 28-35); Wyers (Fig. 1, lock mechanism 34; Fig 18 generally; Col. 6, 33-38); Ray (Fig. 3, integral lock 80 and latch 92); Witchey (Fig. 2, lock mechanism 700).</p>
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Claim 9. Claim 9 is anticipated by Wyers under §102(e). Claim 9 is also obvious in view of Almquist and Bale or Almquist and Smith. The motivation to combine would be to combine the adjustable-height bar of Smith or Bale with the single-height bar of Almquist to allow Almquist to accommodate a variety of trailers.

Claim 9 is also obvious over Almquist in view of Witchey. It would have been obvious to substitute the single hole of Almquist with the teeth (notches) system of Witchey in order to allow locking at a variety of positions.

<p>Claim 9.</p> <p>The device of claim 8 wherein said first arm may be locked within said corresponding arm-receiving aperture at a plurality of positions therealong so that said device may accommodate trailer hitches couplers of variable heights.</p>	<p>Bale (Fig. 1, tab 32 with apertures 34; Col. 4, 4-9); Smith (Fig. 1, scallops 31 allow locking at a plurality of positions; Col. 2, 31-35); Wyers (Fig. 2; Col. 2, 57-60); Witchey (Fig. 2, notches 650).</p>
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Claim 10. Claim 10 is anticipated by Wyers under §102(e). Claim 10 is also obvious in view of Almquist and Bale or Almquist and Smith. Almquist teaches an inverted U-shaped member. The motivation to combine would be to substitute the padlock of Almquist with an integral lock such as those shown in Bale and Smith in order to provide

a unitary device and to prevent the possibility of loss of the padlock. It would be a further motivation to add the increased security of an integral lock to the device taught by Almquist.

Claim 10. The device of claim 8 wherein said locking bar comprises an inverted U-shaped member.	Almquist (Fig. 1, bail 46 with arms 48 and 50; Col. 3, 64-67); Wyers (Fig. 2, bridge section 24 with legs 22; Col. 5, 57-61).
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Claim 11. Claim 11 is anticipated by Wyers under §102(e). Claim 10 is also obvious in view of Almquist and Bale or Almquist and Smith. The motivation to combine would be to use the adjustable-height mechanism of Smith (the grooves, which Smith calls scallops 31) with the single-height bar of Almquist to allow Almquist to accommodate a variety of trailers. Claim 11 is also obvious over Almquist in view of Lee. Lee teaches that it is well known in the locking art to use a ratchet system for locking a leg in a housing, and allowing the lock to be engaged at a variety of heights. It would have been obvious to substitute the single hole of Almquist with the teeth (groove) system of Lee in order to allow locking at a variety of positions.

Claim 11 is also obvious over Almquist in view of Witchey. It would have been obvious to substitute the single hole of Almquist with the teeth (notches) system of Witchey in order to allow locking at a variety of positions.

Claim 11. The device of claim 10, wherein said first arm includes at least one lock-engagable groove thereon permitting said first arm to be locked within said aperture at a discrete position therealong.	Smith (Fig. 1, scallops 31); Wyers (Fig. 3, latch teeth 58); Lee (Fig. 3, teeth 40 on bar 38); Witchey (Fig. 2, notches 650).
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Claim 12. Claim 12 is anticipated by Wyers under §102(e). Claim 10 is also obvious in view of Almquist and Bale or Almquist and Smith. The motivation to combine would be

to use the adjustable-height mechanism of Smith (the grooves, which Smith calls scallops 31) with the single-height bar of Almquist to allow Almquist to accommodate a variety of trailers. Claim 12 is also obvious over Almquist in view of Lee. Lee teaches that it is well known in the locking art to use a ratchet system for locking a leg in a housing, and allowing the lock to be engaged at a variety of heights. It would have been obvious to substitute the single hole of Almquist with the teeth (groove) system of Lee in order to allow locking at a variety of positions.

Claim 12 is also obvious over Almquist in view of Witchey. It would have been obvious to substitute the single hole of Almquist with the teeth (notches) system of Witchey in order to allow locking at a variety of positions.

<p>Claim 12.</p> <p>The device of claim 10, wherein said first arm includes a plurality of lock-engagable grooves thereon permitting said first arm to be locked within said aperture at a plurality of discrete positions therealong.</p>	<p>Smith (Fig. 1, scallops 31); Wyers (Fig. 3, latch teeth 58); Lee (Fig. 3, teeth 40 on bar 38); Witchey (Fig. 2, notches 650).</p>
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Claim 13. Claim 13 is anticipated by Wyers under § 102(e), and is obvious in view of Almquist and Bale or Almquist and Smith. The motivation to combine would be to substitute the padlock of Almquist with an integral lock such as those shown in Bale and Smith in order to provide a unitary device and to prevent the possibility of loss of the padlock. It would be a further motivation to add the increased security of an integral lock to the device taught by Almquist. The limitations of the claims taught by these references are detailed in the claim chart below.

Claim 13 is also obvious in view of Almquist and Witchey. As noted on page 6 of the Examiner's decision on the Wyers patent included in Exhibit A: "Witchey teaches a locking device including a housing 770, 660 supporting an anchor 720 and having an integral key lock and latch 800, 710 to engage a leg 640 and latch structure 650 of a shackle 640, and a bridge plate 630 overlying the anchor 720. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a ball

element for the anchor 720 of Witchey, in view of the teaching of Almquist, since either type of element is capable of engaging a recess of a trailer hitch.”

<p>Claim 13.</p> <p>A device for closing a socket of an unhitched trailer hitch coupler member, said device comprising:</p> <p>an inverted U-shaped locking bar having a pair of arms, wherein at least a portion of said locking bar rests on top of the trailer hitch coupler;</p> <p>a base comprising a pair of arm-receiving apertures located therein,</p> <p>a plug member for receipt within the trailer hitch socket located intermediate said apertures,</p> <p>and an integral lock for lockingly engaging a first said arm within a corresponding said arm-receiving aperture.</p>	<p>Almquist discloses a device for closing the sock of an unhitched trailer hitch coupler (Fig. 4, Col. 1, 60-64), as does Bale (Fig. 1, Col. 1, 59-63), Smith (Col. 1, 1-5), and Wyers (Figs.1-2, Abstract).</p> <p>Almquist (Fig. 1, bail 46 with arms 48 and 50; Col. 3, 64-67); Wyers (Fig. 2, bridge section 24 with legs 22; Col. 5, 57-61); Witchey (Fig. 2, upper plate 610 with post 640 and guide rib 655).</p> <p>Almquist (Fig. 1, bail arm holes 26; Col. 3-4, 67-2); Wyers (Fig. 3, passageways 56; Col. 6, 39-44).</p> <p>Almquist (Fig. 1, plug 40 between bail arm holes 26); Wyers (Fig. 2, hitch ball element 32 between passageways 56).</p> <p>Bale (Figs.1 and 4, locking mechanism 22; Col. 4, 13-26); Smith (Fig. 1, locking mechanism 30; Col. 2, 28-35); Wyers (Fig. 1, lock mechanism 34; Fig 18 generally; Col. 6, 33-38); Witchey (Fig. 2, lock mechanism 700).</p>
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Claim 14. Claim 14 is anticipated under §102(e) by Wyers, and is obvious in view of Almquist and Bale or Almquist and Smith. The motivation to combine would be to combine the adjustable-height bar of Smith or Bale with the single-height bar of Almquist to allow Almquist to accommodate a variety of trailers.

Claim 14 is also obvious over Almquist in view of Witchey. It would have been obvious to substitute the single hole of Almquist with the teeth (notches) system of Witchey in order to allow locking at a variety of positions.

Claim 14. The device of claim 13, wherein said first arm may be locked within said corresponding arm-receiving aperture at a plurality of positions therealong so that said device may accommodate trailer hitches couplers of variable heights.	Bale (Fig. 1, tab 32 with apertures 34; Col. 4, 4-9); Smith (Fig. 1, scallops 31 allow locking at a plurality of positions; Col. 2, 31-35); Wyers (Fig. 2; Col. 2, 57-60); Witchey (Fig. 2, notches 650).
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Claim 15. Claim 15 is anticipated under §102(e) by Wyers, and is obvious in view of Almquist and Smith. The motivation to combine would be to use the adjustable-height mechanism of Smith (the grooves, which Smith calls scallops 31) with the single-height bar of Almquist to allow Almquist to accommodate a variety of trailers. Claim 15 is also obvious over Almquist in view of Lee. Lee teaches that it is well known in the locking art to use a ratchet system for locking a leg in a housing, and allowing the lock to be engaged at a variety of heights. It would have been obvious to substitute the single hole of Almquist with the teeth (groove) system of Lee in order to allow locking at a variety of positions.

Claim 15 is also obvious over Almquist in view of Witchey. It would have been obvious to substitute the single hole of Almquist with the teeth (notches) system of Witchey in order to allow locking at a variety of positions.

<p>Claim 15.</p> <p>The device of claim 13, wherein said first arm includes at least one lock-engageable groove thereon permitting said first arm to be locked within said aperture at a discrete position therealong.</p>	<p>Smith (Fig. 1, scallops 31); Wyers (Fig. 3, latch teeth 58); Lee (Fig. 3, teeth 40 on bar 38); Witchey (Fig. 2, notches 650).</p>
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Claim 16. Claim 16 is anticipated under §102(e) by Wyers, and is obvious in view of Almquist and Smith. The motivation to combine would be to use the adjustable-height mechanism of Smith (the grooves, which Smith calls scallops 31) with the single-height bar of Almquist to allow Almquist to accommodate a variety of trailers. Claim 16 is also obvious over Almquist in view of Lee. Lee teaches that it is well known in the locking art to use a ratchet system for locking a leg in a housing, and allowing the lock to be engaged at a variety of heights. It would have been obvious to substitute the single hole of Almquist with the teeth (groove) system of Lee in order to allow locking at a variety of positions.

Claim 16 is also obvious over Almquist in view of Witchey. It would have been obvious to substitute the single hole of Almquist with the teeth (notches) system of Witchey in order to allow locking at a variety of positions.

<p>Claim 16.</p> <p>The device of claim 15, wherein said first arm includes a plurality of lock-engageable grooves thereon permitting said first arm to be locked within said aperture at a plurality of discrete positions therealong.</p>	<p>Smith (Fig. 1, scallops 31); Wyers (Fig. 3, latch teeth 58); Lee (Fig. 3, teeth 40 on bar 38); Witchey (Fig. 2, notches 650).</p>
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Claim 17. Claim 17 is anticipated under §102(e) by Wyers and under §102(a) by Bale and also by Smith. Claim 4 is also obvious under §103(a) in view of Almquist and Bale



or Almquist and Smith. The motivation to combine would be to substitute the padlock of Almquist with an integral lock such as those shown in Bale and Smith in order to provide a unitary device and to prevent the possibility of loss of the padlock. It would be a further motivation to add the increased security of an integral lock to the device taught by Almquist.

Claim 17 is also obvious in view of Almquist and Witchey. As noted on page 6 of the Examiner's decision on the Wyers patent included in Exhibit A: "Witchey teaches a locking device including a housing 770, 660 supporting an anchor 720 and having an integral key lock and latch 800, 710 to engage a leg 640 and latch structure 650 of a shackle 640, and a bridge plate 630 overlying the anchor 720. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a ball element for the anchor 720 of Witchey, in view of the teaching of Almquist, since either type of element is capable of engaging a recess of a trailer hitch." The limitations of the claims taught by these references are detailed in the claim chart below.

<p>Claim 17.</p> <p>A method for closing the a socket of an unhitched trailer hitch coupler member, said method comprising the steps of:</p> <p>providing a locking bar;</p> <p>providing a base comprising a plug member,</p>	<p>Almquist discloses a device for closing the sock of an unhitched trailer hitch coupler (Fig. 4, Col. 1, 60-64), as does Bale (Fig. 1, Col. 1, 59-63),Smith (Col. 1, 1-5), and Wyers (Figs.1-2, Abstract).</p> <p>Almquist (Fig. 1, bail 46; Col. 4, 3-7); Bale (Fig. 1, retainer assembly 3; Col. 3-4, 67-8); Smith (Fig. 1, upper jaw 12; Col. 3, 44-53); Wyers (Fig. 2, bridge section 24; Col. 6, 4-8); Witchey (fig. 2, upper plate 610).</p> <p>Almquist (Fig. 1, body member 12 and plug 40; Col. 3, 48-53); Bale (Fig. 1,</p>
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	body 1 and hitch ball 26; Col. 3, 40-44); Smith (Fig. 1, lower jaw 11 and dummy ball 46; Col. 3, 44-45); Wyers (Fig. 2, lock housing 30 and hitch ball element 32; Col. 3, 63-67); Witchey (Fig. 2, base plate 620 and male hitch anchor 720).
a locking bar-receiving aperture,	Almquist (Fig. 1, bail arm hole 26; Col. 3-4, 67-2); Bale (Fig. 14, aperture 120); Smith (Fig. 1, bore 16; Col. 2, 7-12); Wyers (Fig. 3, passageways 56; Col. 6, 39-44); Witchey (Fig. 2, hollow bore 680).
and an integral lock;	Bale (Figs.1 and 4, locking mechanism 22; Col. 4, 13-26); Smith (Fig. 1, locking mechanism 30; Col. 2, 28-35); Wyers (Fig. 1, lock mechanism 34; Fig 18 generally; Col. 6, 33-38); Witchey (Fig. 2, locking mechanism 700).
inserting said plug member into the trailer hitch coupler socket;	Almquist (Col. 3, 48-51); Smith (Col. 3, 44-47); Bale (Col. 2, 27-30); Wyers (Abstract); Witchey (Col. 3, 29-31).
inserting a portion of said locking bar into said locking bar-receiving aperture, wherein a least a portion of said locking bar rests on top of said trailer hitch coupler; and	Almquist (Col. 4, 3-11); Smith (Col. 3, 44-53); Bale (Col. 3-4, 67-9); Wyers (Col. 3, 1-13); Witchey (Col. 3, 42-52).
locking said locking bar within said	Almquist (Col. 4, 18-30); Smith (Col. 3,

locking bar-receiving aperture.	49-50); Bale (Col. 4, 13-16); Wyers (Col. 3, 15-20); Witchey (Col. 3, 42-52).
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Claim 18. Claim 18 is anticipated under §102(e) by Wyers. Claim 4 is also obvious under §103(a) in view of Almquist and Bale or Almquist and Smith. The motivation to combine would be to substitute the padlock of Almquist with an integral lock such as those shown in Bale and Smith in order to provide a unitary device and to prevent the possibility of loss of the padlock. It would be a further motivation to add the increased security of an integral lock to the device taught by Almquist.

Claim 18 is also obvious in view of Almquist and Witchey. As noted on page 6 of the Examiner's decision on the Wyers patent included in Exhibit A: "Witchey teaches a locking device including a housing 770, 660 supporting an anchor 720 and having an integral key lock and latch 800, 710 to engage a leg 640 and latch structure 650 of a shackle 640, and a bridge plate 630 overlying the anchor 720. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a ball element for the anchor 720 of Witchey, in view of the teaching of Almquist, since either type of element is capable of engaging a recess of a trailer hitch."

Claim 18. A method for closing a socket of an unhitched trailer hitch coupler member, said method comprising the steps of:  inserting a plug member into a trailer hitch coupler socket,  said plug member being attached to a base having a pair of arm receiving apertures	Almquist discloses a device for closing the sock of an unhitched trailer hitch coupler (Fig. 4, Col. 1, 60-64), as does Bale (Fig. 1, Col. 1, 59-63), Smith (Col. 1, 1-5), and Wyers (Figs.1-2, Abstract); Witchey (Abstract).  Almquist (Col. 3, 48-51); Smith (Col. 3, 44-47); Bale (Col. 2, 27-30); Wyers (Abstract); Witchey Col.2, 24-25).  Almquist (Fig. 1, bail arm holes 26; Col. 3-4, 67-2); Wyers (Fig. 3, passageways 56;
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extending therethrough	Col. 6, 39-44).
and an integral lock;	Bale (Figs.1 and 4, locking mechanism 22; Col. 4, 13-26); Smith (Fig. 1, locking mechanism 30; Col. 2, 28-35); Wyers (Fig. 1, lock mechanism 34; Fig 18 generally; Col. 6, 33-38); Witchey (Fig. 2, locking mechanism 700).
providing an inverted, U-shaped locking bar having a pair of arms;	Almquist (Fig. 1, bail 46 with arms 48 and 50; Col. 3, 64-67); Wyers (Fig. 2, bridge section 24 with legs 22; Col. 5, 57-61); Witchey (Fig. 2, upper plate 610 with post 640 and guide rib 655).
inserting said pair of arms into said pair of arm receiving apertures, wherein a portion of said locking bar rests on top of said trailer hitch coupler;	Almquist (Fig. 1, bail 46 with arms 48 and 50; Col. 3, 64-67); Wyers (Fig. 2, bridge section 24 with legs 22; Col. 5, 57-61).
and locking at least one said arm within at least one said aperture.	Almquist (Col. 4, 18-30); Smith (Col. 3, 49-50); Bale (Col. 4, 13-16); Wyers (Col. 3, 15-20); Witchey (Col. 3, 42-52).

#### **(E) Copies of Patents and Printed Publications**

A copy of every patent and printed publication relied upon or referred to above is attached as Appendix A.

#### **(F) Copy of the Entire Patent**

A copy of the entire patent, including the front face, drawings, and specification/claims (in double column format) for which reexamination is requested is attached as Appendix B. Also attached in Appendix B is a copy of a certificate of correction for the Koy patent. There are no disclaimers or reexamination certificates issued in the patent.

**(G) Certificate of Service**

Diversi-Tech certifies that it has served a copy of this request in its entirety on the patent owner at the address provided for in §1.33(c) by U.S. first class mail. The name and address are as follows:

Robert H. Earp, III  
McDonald, Hopkins, Burke & Haber  
2100 Bank One Center  
600 Superior Avenue, E.  
Cleveland OH 44114

**(H) Estoppel**

Diversi-Tech certifies that the estoppel provisions of §1.907 do not prohibit inter partes reexamination.

**(I) Real Party in Interest**

Diversi-Tech Corp. is the real party in interest.

**(J) Power of Attorney**

Alan L. Edwards is pursuing the present action on behalf of Diversi-Tech Corp. The power of attorney document is attached hereto as Appendix C.

Respectfully submitted,

Date: \_\_\_\_\_

Kunzler & McKenzie  
8 E. Broadway, Suite 600  
Salt Lake City, Utah 84101  
Telephone: 801/994-4646

\_\_\_\_\_/Alan L. Edwards/\_\_\_\_\_

Alan L. Edwards  
Reg. No. 46,919  
Attorney for Applicants

